## PMA Monthly approvals from 2/1/2019 to 2/28/2019

## Original

Submission Number P160050	Date Final Decision 02/08/2019	Review Track PMAO - PMA Origi	Trade Name  BARRICAID ANULAR  CLOSURE DEVICE (ACD)	Appl/Spr Name INTRINSIC THERAPEUTI CS	Approval Order Statement  Approval for the Barricaid Anular Closure Device (ACD). The device is indicated for reducing the incidence of reherniation, and reoperation in skeletally mature patients with radiculopathy (with or without back pain) attributed to a posterior or posterolateral herniation, and confirmed by history, physical examination and imaging studies which demonstrate neural compression using MRI to treat a large anular defect (between 4-6 mm tall and between 6-10 mm wide) following a primary discectomy procedure (excision of herniated intervertebral disc) at a single level between L4 and S1.
P170030	02/22/2019	PMAO - PMA Origi	ORSIRO SIROLIMUS ELUTING CORONARY STENT SYSTEM	BIOTRONIK, INC	Approval of the Orsiro Sirolimus Eluting Coronary Stent System. This device is indicated for improving coronary luminal diameter in patients, including those with diabetes mellitus, with symptomatic heart disease, stable angina, unstable angina, non-ST elevation myocardial infarction or documented silent ischemia due to atherosclerotic lesions in the native coronary arteries with a reference vessel diameter of 2.25 mm to 4.0 mm and a lesion length of < 36 mm.
P170036	02/06/2019	PMAO - PMA Origi	M6-C ARTIFICIAL CERVICAL DISC	SPINAL KINETICS LLC	Approval for the M6-C Artificial Cervical Disc. The M6-C Artificial Cervical Disc is indicated for reconstruction of the disc following single level discectomy in skeletally mature patients with intractable degenerative cervical radiculopathy with or without spinal cord compression at one level from C3 to C7. Degenerative cervical radiculopathy is defined as arm pain and/or a neurological deficit (numbness, weakness, deep tendon reflexes changes) with or without neck pain due to disc herniation and/or osteophyte formation and confirmed by radiographic imaging (CT, MRI, x-rays). The M6-C Artificial Cervical Disc is implanted via an anterior approach. Patients should have failed at least 6 weeks of conservative treatment or exhibit progressive neurological symptoms which could lead to permanent impairment prior to implantation of the M6-C Artificial Cervical Disc.
P180025	02/01/2019	PMAO - PMA Origi	MANTA VASCULAR CLOSURE DEVICE	ESSENTIAL MEDICAL, INC.	Approval for the 14F MANTA Vascular Closure Device. The device is indicated for closure of femoral arterial access sites following the use of 10-14F devices or sheaths (maximum OD/profile of 18F), and the 18F MANTA Vascular Closure Device is indicated for closure of femoral arterial access sites following the use of 15-18F devices or sheaths (maximum OD/profile of 25F).

Total: 4

Supplements

Submission Number	Date Final Decision	Review Track	Trade Name	Appl/Spr Name	Approval Order Statement
N970003/S233	02/22/2019	R - Real-Time Proc	ADVANTIO, INGENIO, VITALIO, FORMIO, ESSENTIO, ACCOLADE, PROPONENT, (INSIGNIA AND ALTRUA 2 SUPPORTED BY LATITUDE CONSULT ONLY) PACEMAKER DEVICES	BOSTON SCIENTIFIC CORP.	Approval for changes to the Server and Communicator software updates necessary for LATITUDE NXT Release.
P820076/S027	02/12/2019	Y - 135 Review Tra	EFH-16; S 60-K; S 60-J; S 60-S	BIOTRONIK, INC.	Approval for the implementation of new biological indicators and reduction of incubation time for the bioindicators for the sterilization process, the use of sterilization process P02 as an alternate sterilization process for cables and adaptors, and parametric release for the sterilization processes.
P840062/S068	02/22/2019	O - Normal 180 Day	ABSORBABLE COLLAGEN PLUG FOR DENTAL SURGERY, ABSORBABLE COLLAGEN TAPE FOR DENTAL SURGERY	INTEGRA LIFESCIENCE S CORP.	Approval for additional trade names: Absorbable Collagen Tape for Dental Surgery and Absorbable Collagen Plug for Dental Surgery.
P860004/S321	02/12/2019	R - Real-Time Proc	SYNCHROMED INFUSION SYSTEM	MEDTRONIC INC.	Approval for a minor design and related minor manufacturing changes to the pumphead roller arm assembly of the SynchroMed® II Drug Infusion Pump.
P890003/S386	02/28/2019	N - Normal 180 Day	CARELINK SMARTSYNC BASE, PATIENT CONNECTOR, HOST APP, PSA APP, COMMON APP, AND CARELINK SMARTSYNC PLATFORM APP	MEDTRONIC, INC.	Approval for changes to the Medtronic CareLink SmartSync Device Manager and an additional application intended to be used for programming Azure and Astra implantable devices.
P910073/S153	02/28/2019	R - Real-Time Proc	RELIANCE 4-FRONT, 4-SITE IS-1 DEFIBRILLATION	BOSTON SCIENTIFIC	Approval for sales packaging and label changes.
P910077/S168	02/22/2019	R - Real-Time Proc	LATITUDE NXT PATIENT MANAGEMENT SYSTEM, LATITUDE WAVE COMMUNICATOR, LATITUDE CONSULT COMMUNICATOR AND LATITUDE NXT SYSTEM SERVER SOFTWARE	BOSTON SCIENTIFIC	Approval for changes to the Server and Communicator software updates necessary for LATITUDE NXT Release 6.1.

Submission Number	Date Final Decision	Review Track	Trade Name	Appl/Spr Name	Approval Order Statement
P950037/S192	02/12/2019	Y - 135 Review Tra	EVIA DR/SR; EVIA DR-T/SR-T; ENTOVIS DR/SR, ENTOVIS DR-T/SR-T; ESTELLA DR/SR; ESTELLA DR-T/SR-T; EFFECTA D/S; EDORA 8 DR/ 8 SR; ENITRA 6 DR-T; ENITRA 8 SR-T; ENITRA 6 SR; ENTICOS 4 DR/ 4 S; ENTICOS 8 SR-T; EVITY 6 DR-T/ 6 SR-T; ETRINSA 6 DR/SR; ETRINSA 6 DR/SR; ETRINSA 6 DR/SR; ETRINSA 6 DR-T/ 8 SR-T, ETRINSA 6 DR-T/ 8 SR-T; ENITRA 8 DR-T/ 8 SR-T; ENITRA 6 DR-T/ 6 SR-T; ENITRA 8 DR-T/ 8 SR-T; ENITRA 8 DR-T/ 8 SR-T; ENITRA 8 DR-T/ 8 SR-T; ENTICOS 8 DR-T; ENITRA 6 DR; ENITRA 6 SR-T; ENTICOS 4 DR; EVITY 8 DR-T/ 8 SR-T; S53-K; S45-K; DH; DH IS-1/DF4; EFH-6F-W; SELOX ST/JT; SIELLO S; SOLIA S; SETROX S, SAFIO S; S 45-S; S 53-F; S 53-S; S 45-F; S 45-J; S 53-J; S 60-F; S 58-K; S 45-JL; S 53-JL; BS IS-1; PK-141; PK-67-S; PK-67-L; PK-155; MPK-4-R; MPK-10-R; PK-82; PK-83, PK-83-B; PK-175; PA-1-C; PK-128; PK-112; PA-1-B; KRG	BIOTRONIK, INC.	Approval for the implementation of new biological indicators and reduction of incubation time for the bioindicators for the sterilization process, the use of sterilization process P02 as an alternate sterilization process for cables and adaptors, and parametric release for the sterilization processes.
P960004/S088	02/28/2019	R - Real-Time Proc	FINELINE II STEROX, EZ.	BOSTON SCIENTIFIC	Approval for the sales packaging and label changes being made to BSC lead families.
P960009/S332	02/12/2019	R - Real-Time Proc	ACTIVA DEEP BRAIN STIMULATION THERAPY SYSTEM	MEDTRONIC INC.	Approval for the Maintenance Release 1 Update to the Model A610 Activa DBS Clinician Programmer Application which updated the impedance measurement workflow, enabled interleaving programming in both hemispheres, and updated reports.

Submission Number	Date Final Decision	Review Track	Trade Name	Appl/Spr Name	Approval Order Statement
P960040/S431	02/22/2019	R - Real-Time Proc	TELIGEN, ENERGEN, PUNCTUA, INCEPTA, ORIGEN, INOGEN, DYNAGEN, AUTOGEN, RESONATE, MOMENTUM, VIGILANT, AND PERCIVA (ICD DEVICES)	BOSTON SCIENTIFIC	Approval for changes to the Server and Communicator software updates necessary for LATITUDE NXT Release.
P960043/S102	02/21/2019	O - Normal 180 Day	PERCLOSE PROGLIDE SUTURE-MEDIATED CLOSURE SYSTEM/ PROSTAR XL PERCUTANEOUS VASCULAR SURGICAL SYSTEM	ABBOTT VASCULAR INC.	Approval for an alternate sterilization site located at Sterigenics UK Limited Cotes Park Lane Somercotes, Alfreton DE55 4NJ United Kingdom.
P970003/S219	02/01/2019	Y - 135 Review Tra	VNS THERAPY SYSTEM	LIVANOVA USA, INC.	Approval for updating the component qualification test method.
P970003/S222	02/14/2019	S - Special CBE	VNS THERAPY SYSTEM	LIVANOVA USA, INC.	Approval for the following labeling updates:  1) Model 1000 (SN < 100,000) High Impedance Warning - the addition of a warning to the VNS Therapy Physicians Manuals for both Epilepsy and Depression regarding the potential for erroneous high impedance warning messages that can be received in certain Model 1000 Generators (i.e. Serial Number (SN) < 100,000); and  2) Model 1000 (SN < 100,000) Package Insert: the creation of a package insert, containing the same warning information described above, that will be placed within the sales packaging of every Model 1000 Generator (SN < 100,000).

Submission Number	Date Final Decision	Review Track	Trade Name	Appl/Spr Name	Approval Order Statement
P980023/S085	02/12/2019	Y - 135 Review Tra	PROTEGO SD/TD; PROTEGO DF-1 SD; PROTEGO PROMRI SDX; PROTEGO DF-1 PROMRI SD; PLEXA SD; PLEXA PROMRI SD; PLEXA DF-1 SD; PLEXA PROMRI DF-1 SD BK-IS4/DF4; IS4/DF4- ADAPTER; PROTEGO S/T; PROTEGO DF-1 PROMRI SDX; PROTEGO DF-1 PROMRI S; PLEXA S; PLEXA PROMRI S; PLEXA DF-1 S; PLEXA PROMRI DF-1 S; DLEXA PROMRI DF-1 S; DH DF4; DH IS-1/ DF4; EFH-30; VL; SI-2; TW; EFH-35; EFH-7F-W; EFH-8F- W; S 72-A/C/E; S 65-C/E/K; S 75-K; S 65-A; S 60-C	BIOTRONIK, INC.	Approval for the implementation of new biological indicators and reduction of incubation time for the bioindicators for the sterilization process, the use of sterilization process P02 as an alternate sterilization process for cables and adaptors, and parametric release for the sterilization processes.
P980023/S089	02/21/2019	R - Real-Time Proc	PLEXA PROMRI S DX ICD LEADS	BIOTRONIK, INC.	Approval for Plexa ProMRI S DX ICD leads.
P980035/S536	02/28/2019	N - Normal 180 Day	CARELINK SMARTSYNC AZURE ASTRA APP AND AZURE ASTRA DR/SR/XT MRI SURESCAN IPGS	MEDTRONIC INC.	Approval for changes to the Medtronic CareLink SmartSync Device Manager and an additional application intended to be used for programming Azure and Astra implantable devices.
P990004/S033	02/20/2019	Y - 135 Review Tra	SURGIFLO HEMOSTATIC MATRIX KIT W/THROMBIN	FERROSAN MEDICAL DEVICES A/S	Approval for a change to the pallet configuration for the Ethylene Oxide sterilization of the Thrombin Kit Package which is a part of the SURGIFLO Hemostatic Matrix Kit with Thrombin.
P010012/S492	02/22/2019	R - Real-Time Proc	COGNIS, ENERGEN, PUNCTUA, INCEPTA, ORIGEN, INOGEN, DYNAGEN, AUTOGEN, RESONATE, MOMENTUM AND VIGILIANT (CRT-D RESYNCHRONIZATION DEVICES)	BOSTON SCIENTIFIC CORP.	Approval for changes to the Server and Communicator software updates necessary for LATITUDE NXT Release.
P010012/S494	02/28/2019	R - Real-Time Proc	ACUITY X4 LEADS, ACUITY SPIRAL LEADS	BOSTON SCIENTIFIC CORP.	Approval for the sales packaging and label changes being made to BSC lead families.

Submission Number	Date Final Decision	Review Track	Trade Name	Appl/Spr Name	Approval Order Statement
P010030/S107	02/27/2019	Y - 135 Review Tra	LIFEVEST WEARABLE DEFIBRILATOR	ZOLL MANUFACTUR ING CORPORATIO N	Approval for an alternate gel supplier.
P010030/S111	02/28/2019	R - Real-Time Proc	LIFEVEST WEARABLE DEFIBRILLATOR	ZOLL MANUFACTUR ING CORPORATIO N	Approval for a material change to the flex tail used in the monitor response button and minor dimensional changes to the enclosure cover.
P030005/S179	02/22/2019		INVIVE, INTUA, VISIONIST AND VALITUDE (CRT-P RESYNCHRONIZATION DEVICES)	GUIDANT CORP.	Approval for changes to the Server and Communicator software updates necessary for LATITUDE NXT Release.
P050007/S037	02/21/2019	O - Normal 180 Day	STARCLOSE SE VASCULAR SURGICAL SYSTEM	ABBOTT VASCULAR DEVICES	Approval for an alternate sterilization site located at Sterigenics UK Limited Cotes Park Lane Somercotes, Alfreton DE55 4NJ United Kingdom.

Submission Number	Date Final Decision	Review Track	Trade Name	Appl/Spr Name	Approval Order Statement
P050023/S121	02/12/2019		ILESTO 7 VR-T; IFORIA 7 VR-T; ILESTO 5 VR-T; IFORIA 5 VR-T; ILESTO 7 VR T DX; IFORIA 7 VR-T DX; ILESTO 5 VR-T DX; IFORIA 5 VR-T DX; ITREVIA 7 VR-T; IPERIA 7 VR-T; ILIVIA 7 VR-T DX (GB/LI); INTICA 5 VR-T DX (GB/LI); INTICA 5 VR-T DX (GB/LI); ILIVIA 7 DF4 VR-T (GB/LI); ILIVIA 7 DF4 VR-T (GB/LI); INTICA 7 VR-T (GB/LI); INVENTRA 7 VR-T; ITREVIA 5 VR-T; IPERIA 5 VR-T; INVENTRA 7 VR-T; ITREVIA 7 VR-T DX; IPERIA 7 VR-T DX; INVENTRA 7 VR-T (GB/LI); INVENTRA 7 VR-T (GB/LI); INTICA 5 VR-T DX; IPERIA 5 VR-T DX; INVENTRA 5 VR-T DX; INTICA 7 DF4 VR-T (GB/LI); INTICA 5 VR-T (GB/LI); INTICA 5 DF4 VR-T (GB/LI); INLEXA 7 VR-T DX (GB/LI); INLEXA 7 VR-T DF4 (GB/LI); INLEXA 7 VR-T DF4 (GB/LI); INLEXA 7 VR-T DF4 (GB/LI); INLEXA 7 DR-T; ITREVIA 7 DR-T; ILIVIA 7 DR-T (GB/LI); INTICA 7 DR-T OF4 (GB/LI); INTICA 5 DR-T; IVENTRA 7 DR-T; INLEXA 7 DR-T (GB/LI); INTICA 5 DR-T; IVENTRA 5 DR-T; INLEXA 7 DR-T (GB/LI); INTICA 5 DR-T; IVENTRA 5 DR-T; INLEXA 7 DR-T (GB/LI); INTICA 5 DR-T; IVENTRA 5 DR-T; INLEXA 7 DR-T (GB/LI); INTICA 5 DR-T; IVENTRA 5 DR-T; INLEXA 7 DR-T (GB/LI); INTICA 5 DR-T; IVENTRA 5 DR-T; INLEXA 7 DR-T (GB/LI);	BIOTRONIK, INC.	Approval for the implementation of new biological indicators and reduction of incubation time for the bioindicators for the sterilization process, the use of sterilization process P02 as an alternate sterilization process for cables and adaptors, and parametric release for the sterilization processes.

Submission Number P050027/S014	Date Final Decision 02/21/2019	Review Track R - Real-Time Proc	Trade Name	Appl/Spr Name KARL STORZ	Approval Order Statement Approval for the following alternate sterilization methods for the Flexible PDD Video
F03002773014	02/21/2019	N - Neal-Time Floc	PHOTODYNAMIC DIAGNOSTIC D-LIGHT C (PDD) SYSTEM	ENDOSCOPY- AMERICA, INC.	Cystoscopes (P/N: 11272VNIA and 11272VNIUA): STERRAD NX Advanced Cycle, STERRAD 100 NX Flex and Duo Cycles, STERIS V-PRO maX Flexible Cycle and Steris V-PRO 60 Flexible Cycle.
P070008/S094	02/12/2019	Y - 135 Review Tra	EVIA HF/ HF-T; ENTOVIS HF/ HF-T; EDORA 8 HF-T; ENITRA 8 HF-T; ENTICOS 8 HF-T; EVITY 8 HF-T; ETRINSA 8 HF T; EPYRA 8 HF-T; ELUNA 8 HF-T; EDORA 8 HF-T QP; ENITRA 8 HF-T QP; ENITCOS 8 HF-T QP; EVITY 8 HF-T QP; COROX OTW BP; COROX OTW-L BP; COROX PROMRI OTW BP; SENTUS PROMRI OTW QP S; SENTUS PROMRI OTW QP S-XX/49; COROX OTW-S BP; COROX PROMRI OTW-L BP; COROX PROMRI OTW-L BP; COROX PROMRI OTW-L BP; COROX PROMRI OTW-L SP; COROX PROMRI OTW-L SP; SENTUS PROMRI OTW QP L; SENTUS PROMRI OTW QP L-XX/49	BIOTRONIK, INC.	Approval for the implementation of new biological indicators and reduction of incubation time for the bioindicators for the sterilization process, the use of sterilization process P02 as an alternate sterilization process for cables and adaptors, and parametric release for the sterilization processes.
P100034/S022	02/28/2019	R - Real-Time Proc	OPTUNE SYSTEM	NOVOCURE, LTD.	Approval for a color change to the INE Transducer Array medical tape from white to tan, and a change to the release liner of the INE Transducer Array from a paper-based material to polyester.
P100042/S020	02/28/2019	R - Real-Time Proc	APTIMA HPV ASSAY	GEN-PROBE INCORPORAT ED	Approval for an alternate cleaning method for the samples racks used on the Panther, Panther Fusion, and Tigris instruments.
P100044/S037	02/28/2019	R - Real-Time Proc	PROPEL CONTOUR SINUS IMPLANT	INTERSECT ENT	Approval for modifications to the design and manufacturing of the delivery system, including the implementation of mechanical press fit bond joints, new dimensional specifications, revisions to the tip molding process, and a redefined tensile strength specification for the applicator.
P100047/S133	02/21/2019	O - Normal 180 Day	HEARTWARE VENTRICULAR ASSIST SYSTEM	MEDTRONIC	Approval of the protocol changes for the post-approval study (PAS) protocol.

Submission Number	Date Final Decision	Review Track	Trade Name	Appl/Spr Name	Approval Order Statement
P110042/S119	02/22/2019	R - Real-Time Proc	EMBLEM (SUBCUTANEOUS ICD DEVICES)	BOSTON SCIENTIFIC CORPORATIO N	Approval for changes to the Server and Communicator software updates necessary for LATITUDE NXT Release.
P110042/S120	02/28/2019	R - Real-Time Proc	EMBLEM S-ICD, ELECTRODE	BOSTON SCIENTIFIC CORPORATIO N	Approval for the sales packaging and label changes being made to BSC lead families.
P120007/S018	02/28/2019	R - Real-Time Proc	APTIMA HPV 16 18/45 GENOTYPE ASSAY	GEN-PROBE INCORPORAT ED	Approval for an alternate cleaning method for the samples racks used on the Panther, Panther Fusion, and Tigris instruments.
P120016/S026	02/05/2019	O - Normal 180 Day	CARDIVA VASCADE VASCULAR CLOSURE SYSTEM (VCS)	CARDIVA MEDICAL, INC.	Approval for changing your California headquarters facility to 1615 Wyatt Dr., Santa Clara, California, for the VASCADE Vascular Closure System (VCS) 700-500DX, 70-580I, 800-612C devices.
P130012/S006	02/21/2019	S - Special CBE	MYOPORE SUTURELESS MYOCARDIAL PACING LEAD	GREATBATCH MEDICAL	Approval for revisions and enhancements to the content in the Myopore lead Instructions for Use.
P130019/S019	02/15/2019	O - Normal 180 Day	MAESTRO RECHARGEABLE SYSTEM	RESHAPE LIFESCIENCE S, INC.	Approval of the revised protocol which includes modification to the follow-up schedule for the post-approval study (PAS) protocol.
P130022/S019	02/08/2019	N - Normal 180 Day	SENZA SPINAL CORD STIMULATION (SCS) SYSTEM	NEVRO CORPORATIO N	Approval for conditional Magnetic Resonance labeling for the Senza Implantable Pulse Generator (IPG) model IPG2000.
P130024/S026	02/14/2019	R - Real-Time Proc	LUTONIX 035 DRUG COATED BALLOON PTA CATHETER	LUTONIX	Approval for a shelf life extension to 24 months for devices with balloon sizes 4 x 220 mm and 5 x 220 mm (standard balloon) and 6 x 220 mm (low profile balloon).
P130026/S038	02/11/2019	O - Normal 180 Day	TACTICATH CONTACT FORCE ABLATION CATHETER, SENSOR ENABLED	ST. JUDE MEDICAL	Approval to add additional manufacturing site and additional sterilization site in Costa Rica for the TactiCath SE.
P130026/S039	02/15/2019	S - Special CBE	TACTICATH CONTACT FORCE ABLATION CATHETER, SENSOR ENABLED	ST. JUDE MEDICAL	Approval of a manufacturing change to add a tip adhesive fixture.
P140009/S038	02/14/2019	Y - 135 Review Tra	4CH & 8CH INFINITY DBS SYSTEM FLEX EXTENSION	ABBOTT MEDICAL	Approval for five changes to specific steps within the manufacturing process of the 4 and 8 Channel Infinity DBS System Flex Extensions (Models 6355, 6356, 6359, 6371, 6372, and 6373).
P140032/S020	02/15/2019	N - Normal 180 Day	IMPLANTABLE SYSTEM FOR REMODULIN	MEDTRONIC, INC.	Approval for design and packaging changes as a result of a manufacturing site location change of the Model 8551 Refill Kit used with the Implantable System for Remodulin (ISR)

Submission Number	Date Final Decision	Review Track	Trade Name	Appl/Spr Name	Approval Order Statement
P150011/S015	02/08/2019	S - Special CBE	PERCEVAL HEART VALVE	LIVANOVA CANADA CORP.	Approval for labeling changes to instruct users on safe, future valve-in-valve implantations.
P150012/S067	02/22/2019	R - Real-Time Proc	INGENIO MRI, VITALIO MRI, FORMIO MRI, ESSENTIO MRI, PROPONENT MRI AND ACCOLADE MRI (PACEMAKER DEVICES)	BOSTONSCIE NTIFIC	Approval for changes to the Server and Communicator software updates necessary for LATITUDE NXT Release.
P150012/S070	02/28/2019	R - Real-Time Proc	INGEVITY MRI	BOSTONSCIE NTIFIC	Approval for the sales packaging and label changes being made to BSC lead families
P150021/S037	02/26/2019	R - Real-Time Proc	FREESTYLE LIBRE PRO FLASH GLUCOSE MONITORING SYSTEM	ABBOTT DIABETES CARE INC.	Approval for a change to the Printed Circuit Board Assembly (PCBA) Battery Contact for the sensor puck assembly.
P150030/S006	02/19/2019	R - Real-Time Proc	R3 DELTA CERAMIC ACETABULAR SYSTEM	SMITH & NEPHEW, INC.	Approval for an additional supplier for the Inner Packaging Tyvek lid.
P160001/S030	02/14/2019	S - Special CBE	OBALON BALLOON SYSTEM	OBALON THERAPEUTI CS, INC.	Approval for changes to physician and patient labeling in response to reported cases of gastric perforation.
P160008/S004	02/19/2019	R - Real-Time Proc	HEARTSINE TECHNOLOGIES LLC'S SAMARITAN PUBLIC ACCESS AUTOMATED EXTERNAL DEFIBRILLATORS AND ACCESSORIES	HEARTSINE TECHNOLOGI ES LLC	Approval for minor changes including the addition of EMC suppression circuitry, PCBA and membrane standardization, related manufacturing changes, and labeling updates.
P160023/S009	02/28/2019	R - Real-Time Proc	APTIMA HCV QUANT DX ASSAY	HOLOGIC, INC.	Approval for an alternate cleaning method for the samples racks used on the Panther, Panther Fusion, and Tigris instruments.
P160030/S029	02/26/2019	R - Real-Time Proc	FREESTYLE LIBRE FLASH GLUCOSE MONITORING SYSTEM	ABBOTT DIABETES CARE INC.	Approval for a change to the Printed Circuit Board Assembly (PCBA) Battery Contact for the sensor puck assembly.
P160031/S001	02/08/2019	N - Normal 180 Day	ASPIRE CRISTALLE BREAST TOMOSYNTHESIS SYSTEM	FUJIFILM MEDICAL SYSTEMS U.S.A., INC.	Approval for the implementation of the synthesized 2D (S-View) image, changing the image processing in DBT reconstruction to iterative super-resolution reconstruction (ISR), applying new image processing, Dynamic Visualization II for mammography (DVIIm), to DBT and synthesized 2D images, and related changes in the indications for use (IFU).

Submission Number	Date Final Decision	Review Track	Trade Name	Appl/Spr Name	Approval Order Statement
P160048/S003	02/01/2019	O - Normal 180 Day	EVERSENSE CONTINUOUS GLUCOSE MONITORING SYSTEM (CGMS-ENTIRE SYSTEM), EVERSENSE SENSOR, EVERSENSE INSERTION TOOLS, EVERSENSE SMART TRANSMITTER AND EVERSENSE ADHESIVE PATCH, EVERSENSE MOBILE MEDICAL APPLICATION	SENSEONICS, INCORPORAT ED	Approval to add final packaging, storage, and distribution activities for the Eversense Continuous Glucose Monitoring System at Woodfield Distribution, LLC, Boca Raton, FL.
P170008/S011	02/13/2019	Y - 135 Review Tra	ELUNIR; RIDAFOROLIMUS ELUTING CORONARY STENT SYSTEM	MEDINOL, LTD.	Approval for introduction of a new analytical test method for determination of the concentration of the polymers in the drug solution, and removal of certain tests for the polymer stock solutions and the drug solution.
P170018/S002	02/19/2019	R - Real-Time Proc	LIFEPAK® CR2 DEFIBRILLATOR	PHYSIO- CONTROL, INC	Approval for software updates related to device readiness and cellular AED event transmissions.
P170025/S007	02/28/2019	R - Real-Time Proc	APTIMA HBV QUANT ASSAY	HOLOGIC, INC	Approval for an alternate cleaning method for the samples racks used on the Panther, Panther Fusion, and Tigris instruments.

Total: 57

## 30-Day Notice

Submissi Number		Date Final Decision	Review Track	Trade Name	Appl/Spr Name	Approval Order Statement
N970003/	S235 (	02/19/2019	X - 30-Day Notice	ACCOLADE PACEMAKERS	BOSTON SCIENTIFIC CORP.	Add a Post-Reflow inspection using 3D technology.

Submission Number	Date Final Decision	Review Track	Trade Name	Appl/Spr Name	Approval Order Statement
N970012/S155	02/15/2019	X - 30-Day Notice	MAS 700 INFLATABLE	BOSTON	
N970012/3133	02/13/2019	A - 30-Day Notice	PENILE PROSTHESIS (IP) WITH AND WITHOUT INHIBIZONE	SCIENTIFIC CORP.	Changes to the manufacture of the flat polyethylene terephthalate (PET) yarn.
N970012/S156	02/15/2019	X - 30-Day Notice	AMS 700 SERIES PRODUCT LINE/INFLATABLE PENILE PROSTHESIS (IPP) WITH AND WITHOUT INHIBIZONE TREATMENT	BOSTON SCIENTIFIC CORP.	Relocation of and changes to the milling and molding process of the rear tip component.
P830055/S221	02/04/2019	X - 30-Day Notice	LCS(R) TOTAL KNEE SYSTEM	DEPUY, INC.	Modification of repack Manufacturing Process Specification for Universal Stems.
P840039/S063	02/28/2019	X - 30-Day Notice	PMMA POSTERIOR CHAMBER INTRAOCULAR LENSES	BAUSCH & LOMB, INC.	Ethylene oxide and ethylene chlorohydrin residual testing for the silicone and PMMA intraocular lenses be transferred to a new testing laboratory.
P880090/S030	02/28/2019	X - 30-Day Notice	PMMA ANTERIOR CHAMBER INTRAOCULAR LENSES	BAUSCH & LOMB, INC.	Ethylene oxide and ethylene chlorohydrin residual testing for the silicone and PMMA intraocular lenses be transferred to a new testing laboratory.
P910061/S025	02/28/2019	X - 30-Day Notice	SOFPORT POSTERIOR CHAMBER INTRAOCULAR LENSES	BAUSCH & LOMB	Ethylene oxide and ethylene chlorohydrin residual testing for the silicone and PMMA intraocular lenses be transferred to a new testing laboratory.
P950020/S093	02/19/2019	X - 30-Day Notice	WOLVERINE CORONARY CUTTING BALLOON	BOSTON SCIENTIFIC CORP.	Addition of new equipment for the manufacture of a device component.
P950020/S094	02/14/2019	X - 30-Day Notice	WOLVERINE CORONARY CUTTING BALLOON	BOSTON SCIENTIFIC CORP.	Removal of an incoming inspection and modification to the shelf life evaluation of a product component.
P950020/S095	02/12/2019	X - 30-Day Notice	WOLVERINE CORONARY CUTTING BALLOON	BOSTON SCIENTIFIC CORP.	Removal of a redundant balloon inspection step.
P960040/S433	02/13/2019	X - 30-Day Notice	NG3 DEVICES	BOSTON SCIENTIFIC	Move the supplier location for fabrication of the Zener diode wafer and to utilize an existing supplier to conduct electrical inspection and dicing of the wafer.
P980035/S575	02/13/2019	X - 30-Day Notice	ASTRA S DR MRI IPG; ASTRA S SR MRI IPG; ASTRA XT DR MRI IPG; ASTRA XT SR MRI IPG; AZURE S DR MRI IPG; AZURE S SR MRI IPG; AZURE XT DR MRI IPG; AZURE XT DR MRI IPG; AZURE XT SR MRI; AZURE XT SR MRI IPG	MEDTRONIC INC.	Addition of a capacitor inspection step and an updated packaging method used at an external supplier.

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P000025/S107	02/22/2019	X - 30-Day Notice	MED-EL COCHLEAR IMPLANT SYSTEM	MED-EL CORP.	Addition of a new supplier for a cochlear implant electrode wire.
P000037/S053	02/26/2019	X - 30-Day Notice	ON-X PROSTHETIC HEART VALVE	ON-X LIFE TECHNOLOGI ES, INC.	Implementation of new tooling and modified CNC software used to machine On-X device housing substrates.
P010012/S496	02/04/2019	X - 30-Day Notice	ACUITY X4 E24 MOLDING NOR OPTIMIZATION	BOSTON SCIENTIFIC CORP.	New normal operating range for molding temperature and cure time during the molding process.
P010012/S497	02/13/2019	X - 30-Day Notice	NG4 DEVICES	BOSTON SCIENTIFIC CORP.	Move the supplier location for fabrication of the Zener diode wafer and to utilize an existing supplier to conduct electrical inspection and dicing of the wafer.
P010015/S390	02/13/2019	X - 30-Day Notice	PERCEPTA BIPOLAR CRT- P; PERCEPTA QUADRIPOLAR CRT-P; SERENA BIPOLAR CRT-P; SERENA QUADRIPOLAR CRT-P; SOLARA BIPOLAR CRT-P; SOLARA QUADRIPOLAR CRT-P	MEDTRONIC INC.	Addition of a capacitor inspection step and an updated packaging method used at an external supplier.
P010030/S113	02/14/2019	X - 30-Day Notice	LIFEVEST WEARABLE DEFIBRILLATOR	ZOLL MANUFACTUR ING CORPORATIO N	Alternate supplier for the LifeVest 4000 clamshell shipping container.
P010047/S061	02/22/2019	X - 30-Day Notice	PROGEL PLEURAL AIR LEAK SEALANT	NEOMEND, INC.	Change to implement multiple autoclaving cycles for carboys that directly contact materials used in the manufacture of approved device.
P020047/S071	02/20/2019	X - 30-Day Notice	MULTI-LINK 8, MULTI-LINK 8 SV, AND MULTI-LINK 8 LL CORONARY STENT SYSTEM	ABBOTT VASCULAR	Add a third sterilization chamber at the contract sterilizer.
P030005/S181	02/19/2019	X - 30-Day Notice	ACCOLADE CARDIAC RESYNCHRONIZATION THERAPY PACEMAKERS	GUIDANT CORP.	Add a Post-Reflow inspection using 3D technology.
P030011/S067	02/20/2019	X - 30-Day Notice	SYNCARDIA TEMPORARY TOTAL ARTIFICAL HEART (TAH-T) SYSTEM	SYNCARDIA SYSTEMS, LLC	Change in supplier and changes to components of the Freedom Driver Power Adaptive Assembly.
P040021/S038	02/26/2019	X - 30-Day Notice	BIOCOR VALVE, SUPRA VALVE; EPIC VALVE, SUPRA	ST. JUDE MEDICAL, INC.	Reduction in the concentration of glutaraldehyde in the manufacturing rinse solution.

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P040037/S126	02/13/2019	X - 30-Day Notice	GORE VIABAHN ENDOPROSTHESIS	W.L. GORE & ASSOCIATES,I NC	Implementation of a new edge trim laser for use in the manufacture of the GORE VIABAHN Endoprosthesis and GORE VIABAHN Endoprosthesis with Heparin Bioactive Surface.
P040038/S034	02/20/2019	X - 30-Day Notice	XACT CAROTID STENT SYSTEM	ABBOTT VASCULAR INC.	Add a third sterilization chamber at the contract sterilizer.
P050023/S129	02/25/2019	X - 30-Day Notice	DEFIBRILLATOR, IMPLANTABLE CARDIOVERTER, WITH CARDIAC RESYNCHRONIZATION (CRT-D); DEFIBRILLATOR, IMPLANTABLE, DUAL- CHAMBER; IMPLANTABLE CARDIOVERTER DEFIBRILLATOR (NON- CRT)	BIOTRONIK, INC.	Automated manufacturing for the IS4/DF4 connector modules used in device headers.
P070008/S100	02/25/2019	X - 30-Day Notice	PULSE GENERATOR, PACEMAKER, IMPLANTABLE, WITH CARDIAC RESYNCHRONIZATION (CRT-P)	BIOTRONIK, INC.	Automated manufacturing for the IS4/DF4 connector modules used in device headers.
P070015/S144	02/20/2019	X - 30-Day Notice	XIENCE V AND XIENCE NANO EVEROLIMUS ELUTING CORONARY STENT SYSTEMS	ABBOTT VASCULAR INC.	Add a third sterilization chamber at the contract sterilizer.
P080006/S130	02/11/2019	X - 30-Day Notice	ATTAIN ABILITY LEAD	MEDTRONIC INC.	Procure Titanium rod stock material from a different sub-tier supplier and to incorporate an additional drawing process.
P080011/S089	02/21/2019	X - 30-Day Notice	BIOFINITY TORIC	COOPERVISIO N MANUFACTUR ING, LTD.	Implementation of the Shin Nisson DL-1000 lensmeter at Quality Control 1 testing for use in the manufacture of the Biofinity Toric (comfilcon A) Lenses at the United Kingdom manufacturing site.
P080011/S090	02/26/2019	X - 30-Day Notice	COMFILCON A SOFT (HYDROPHILIC) EXTENDED WEAR CONTACT LENSES	COOPERVISIO N MANUFACTUR ING, LTD.	Introduction of Biofinity Line 19 in Juana Diaz, Puerto Rico to produce Biofinity Sphere and Toric Lenses.
P100021/S075	02/21/2019	X - 30-Day Notice	ENDURANT, ENDURANT II, ENDURANT IIS STENT GRAFT SYSTEMS	MEDTRONIC VASCULAR	Modify the sampling plan of an in-process inspection of the suprarenal stent rings.

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P110010/S162	02/14/2019	X - 30-Day Notice	PROMUS ELEMENT PLUS EVEROLIMUS ELUTING PLATINUM CHROMIUM CORONARY STENT SYSTEM MONORAIL (MR) AND OVER-THE-WIRE (OTW); PROMUS PREMIER EVEROLIMUS ELUTING PLATINUM CHROMIUM CORONARY STENT SYSTEM MONORAIL (MR) AND OVER-THE-WIRE (OTW)	BOSTON SCIENTIFIC CORP.	Removal of an incoming inspection and modification to the shelf life evaluation of a product component.
P110019/S104	02/20/2019	X - 30-Day Notice	XIENCE PRIME, SV, LL; XIENCE XPEDITION, SV, LL; EVEROLIMUS ELUTING CORONARY STENT SYSTEMS;XIENCE ALPIN AND SIERRA EVEROLIMUS ELUTING CORONARY STENT SYSTEM	ABBOTT VASCULAR	Add a third sterilization chamber at the contract sterilizer.
P120020/S021	02/20/2019	X - 30-Day Notice	SUPERA PERIPHERAL STENT SYSTEM	ABBOTT VASCULAR (IDEF TECHNOLOGI ES INC)	Add a third sterilization chamber at the contract sterilizer.
P130006/S065	02/13/2019	X - 30-Day Notice	GORE VIABAHN ENDOPROSTHESIS WITH HEPARIN BIOACTIVE SURFACE	W.L. GORE & ASSOCIATES,I NC	Implementation of a new edge trim laser for use in the manufacture of the GORE VIABAHN Endoprosthesis and GORE VIABAHN Endoprosthesis with Heparin Bioactive Surface.
P130013/S026	02/20/2019	X - 30-Day Notice	WATCHMAN LEFT ATRIAL APPENDAGE CLOSURE (LAAC) DEVICE WITH DELIVERY SYSTEM	BOSTON SCIENTIFIC CORP.	Alternate visual inspection tool for the frame.
P130017/S025	02/20/2019	X - 30-Day Notice	COLOGUARD	EXACT SCIENCES CORPORATIO N	Qualification of an alternate supplier.
P130026/S041	02/25/2019	X - 30-Day Notice	TACTICATH QUARTZ CONTACT FORCE ABLATION CATHETER	ST. JUDE MEDICAL	Reduction in frequency of bacterial endotoxin testing for the TactiCath Quartz Catheter.

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Number	Decision	Review Track	Trade Name	Name	Approval Order Statement
P130030/S059	02/14/2019	X - 30-Day Notice	REBEL STENT SYSTEM MONORAIL (MR) AND OVER-THE-WIRE (OTW)	BOSTON SCIENTIFIC CORP.	Removal of an incoming inspection and modification to the shelf life evaluation of a product component.
P140031/S081	02/18/2019	X - 30-Day Notice	CERTITUDE INTRODUCER SHEATH SET AND CRIMPER	EDWARDS LIFESCIENCE S, LLC.	Addition of a new cleanroom for the manufacture of the Certitude Introduce sheath set and Crimper.
P140032/S026	02/04/2019	X - 30-Day Notice	IMPLANTABLE SYSTEM FOR REMODULIN	MEDTRONIC, INC.	Changes to the Implantable System for Remodulin, including the implantable catheter, implantable catheter and revision kit, and the implantable infusion pump, which includes minor changes to the specification documentation, incoming inspection, manufacturing process and manufacturing validation.
P150001/S058	02/21/2019	X - 30-Day Notice	MINIMED 630G SYSTEM	MEDTRONIC MINIMED	Introduce a harvest/reclaim process for pump motors in the MiniMed 630G and 670G Pumps. The 630G and 670G Pumps are components of the MiniMed 630G and MiniMed 670G Systems.
P150003/S046	02/14/2019	X - 30-Day Notice	SYNERGY EVEROLIMUS ELUTING PLATINUM CHROMIUM CORONARY STENT SYSTEM MONORAIL (MR) AND OVER-THE-WIRE (OTW)	BOSTON SCIENTIFIC CORPORATIO N	Removal of an incoming inspection and modification to the shelf life evaluation of a product component.
P150012/S071	02/19/2019	X - 30-Day Notice	ACCOLADE MRI PACEMAKERS	BOSTONSCIE NTIFIC	Add a Post-Reflow inspection using 3D technology.
P150016/S017	02/22/2019	X - 30-Day Notice	TRIDYNE VASCULAR SEALANT	NEOMEND, INC.	Change to implement multiple autoclaving cycles for carboys that directly contact materials used in the manufacture of approved device.
P150033/S048	02/13/2019	X - 30-Day Notice	MICRA TPS	MEDTRONIC INC.	Addition of a capacitor inspection step and an updated packaging method used at an external supplier.
P160014/S007	02/20/2019	X - 30-Day Notice	COBRA PZF NANOCOATED CORONARY STENT SYSTEM	CELONOVA BIOSCIENCES , INC.	Move in-process inspections, move the location of the lot number label on the device, and change the lot number label process.
P160017/S054	02/21/2019	X - 30-Day Notice	MINIMED 670G SYSTEM	MEDTRONIC MINIMED, INC.	Introduce a harvest/reclaim process for pump motors in the MiniMed 630G and 670G Pumps. The 630G and 670G Pumps are components of the MiniMed 630G and MiniMed 670G Systems.
P160038/S008	02/25/2019	X - 30-Day Notice	PRAXIS EXTENDED RAS PANEL	ILLUMINA, INC.	Remove yield as an in-process QC specification.
P160045/S013	02/13/2019	X - 30-Day Notice	ONCOMINE DX TARGET TEST	LIFE TECHNOLOGI ES CORPORATIO N	Addition of in-process concentration measurements of device sub-components.

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P170006/S009	02/19/2019	X - 30-Day Notice	AVALUS BIOPROSTHESIS	MEDTRONIC INC.	Addition of two new bovine tissue suppliers.
P170008/S012	02/15/2019	X - 30-Day Notice	ELUNIR¿ RIDAFOROLIMUS ELUTING CORONARY STENT SYSTEM	MEDINOL, LTD.	Introduction of automated stent folding and welding.
P170008/S013	02/22/2019	X - 30-Day Notice	ELUNIR¿ RIDAFOROLIMUS ELUTING CORONARY STENT SYSTEM	MEDINOL, LTD.	Reducing the sample size used for the drug impurity test.
P170018/S001	02/19/2019	X - 30-Day Notice	LIFEPAK CR2 DEFIBRILLATOR	PHYSIO- CONTROL, INC	Changes to the end item test equipment hardware and software used in the manufacturing of the LIFEPAK CR2.

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